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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/781,638

02/12/2001

Suraj C. Kothari

900.174US1

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04/11/2006

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EXAMINER

DAS, CHAMELI

ART UNIT

PAPER NUMBER

2192

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/781,638

Applicant(s)

KOTHARI ET AL.

Examiner

CHAMELI C. DAS

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-5,11-13,19,20,22,23,32-34,40,41,64,68,78,91 and 92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-5,11-13,19,20,22,23,32-34,40,41,64,68,78,91 and 92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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1. This action is in response to the amendment filed on 1/30/06.
2. Claims 1, 11, 2, 32, and 68 have been amended.
3. Claims 3, 6-10, 14-18, 21, 24, 27-31, 35-39, 42-63, 65-67, 69-77, 79-90, and 93-94 have been canceled.
4. Claims 1-2, 4-5, 11-13, 19-20, 22-23, 32-34, 40-41, 64, 68, 78, and 91-92 have been rejected.

### ***Claim Objections***

5. Claims 1, 22 are objected to because of the following informalities: The word "BLAST" should be after "Block-Level Abstract Syntax Tree". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 22-23, 25-2, 32-34, 40-41 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

The claims 22-23, 25-2, 32-34, 40-41 are directed to "a signal-bearing media". Signal and carrier waves do not fall with any class of statutory subject matter, and thus claims 22-23, 25-2, 32-34, 40-41 are not limited to statutory subject matter. See Interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility Annex IV, Published in the OG 22 Nov 2005.

***Response to the Arguments***

8. Applicant's argument filed on 1/30/06 has been fully considered but they are not persuasive. In remarks, the applicant argues in substance:

The applicant argued in substance:

***(1) As per claims 1 and 22, Clark and Dollin do not disclose, "determining a cross-reference between the program slice program, a control block in the one or more control blocks, and a subset of the source code".***

***Response:***

(1) As per claims 1 and 22 Clark and Dollin do not disclose, "determining a cross-reference between the program slice program, a control block in the one or more control blocks, and a subset of the source code". However, Jacobson discloses the above limitation. Jacobson discloses to build and determine the cross-reference between the program slice program, a control block and a subset of the source code. (See Fig 1, col 4 lines 55-67, col 5 lines 35-40) where the "procedure division" is the program slice program and subset of the source code and the block "IF EMP-DEPT= 123" is the "control block", in (col 2 lines 42-49), Jacobson discloses that "the viewer must be able to associate a reference with the correct definition" inherently including determining a cross-reference between the programs. The modification would be obvious because it is easier for a computer programmer to view and understand the source code and the user can look up the definition of, or references to, a name without typing the name and as a result, lookups are rapid and accurate.

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**(2) As per claims 11 and 32, Clark, Dollin and Jacobson do not disclose, “performing semantic abstraction to group a subset of nodes together based on the semantic information”.**

**Response:**

(2) Dollin (US 6,594,783) discloses the above limitation. See col 3 lines 55-67, col 4 lines 1-4, where “the node is derived by combining the code sequence for its sub-nodes” (col 4 lines 3-4). According the present application, nodes corresponding to a logical category of computations. Dollin discloses that the nodes corresponding to a logical category of computations in (col 5 lines 4-16), where “**constant K, a leaf node representing a constant value K. if(T,X,Y), a conditional node with predicate T, then-part X, and else part Y**”, *this clearly indicates that the nodes corresponding a logical (if-then-else) category of computations.* Thus Dollin discloses semantic abstraction as the term is used in Applicant’s specification.

The modification would be obvious because one of the ordinary skill in the art would be motivated to provide a method that allow an improved code analysis through the use of an abstract syntax tree and semantic operation.

**(3) As per claim 64, neither Clark nor Dollin disclose “a cross-reference between the code browser, the block-level abstract syntax tree viewer, the program slice browser, and the template viewer”.**

**Response:**

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(3) Jacobson discloses a cross-reference between the code browser, syntax of the programming language, the program slice browser and the template viewer in (col 2 lines 22-50, Fig 1, 2A, and 3B) and (col 2 lines 61-68, col 3 lines 1-11, col 7 lines 10-26), where "display screen" is the browser, "source program" is the "code", "procedure division" is the "program slice", the template viewer is discloses in col 7 lines 10-26, where "the cross-reference consists of a hash table and a large number of cross-reference entries" and the hash table contains the list of reserved word which can be re-used and the user can customize the list (col 4 lines 24-37), it clearly indicates that the list of reserved words which is stored in the memory in a form of hash table (col 4 lines 34-36) is the "template".

The modification would be obvious because it is easier for a computer programmer to view and understand the source code and the user can look up the definition of, or references to, a name without typing the name and as a result, lookups are rapid and accurate.

Jacobson does not disclose that syntax is in abstract tree form. However, Dollin (US 6,594,783) discloses abstract syntax tree (Dollin, abstract, col 3 lines 3-6). The modification would be obvious because one of the ordinary skill in the art would be motivated to provide a improved code sequence verification through the use of an abstract syntax tree.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is 571-272-3696.

The examiner can normally be reached on Monday-Friday from 7:00 A.M. to 3:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Tuan Dam can be reached at 571-272-3695. The fax number for this group is (703) 872-9306.

*Chameli C. Das*  
CHAMELI C. DAS  
PRIMARY EXAMINER  
4/6/06